

## **AMENDMENTS TO THE CLAIMS**

### **In the Claims:**

This listing of the claims will replace all prior versions, and listings, of claims in the application.

### **Listing of the Claims:**

1. (Currently amended) A method for reducing a non-central nervous system tumor mass comprising the step of administering to a patient suffering from cancer a therapeutically effective amount of a Herpes simplex virus (HSV) comprising a modified HSV genome wherein said modification comprises a modification of an inverted repeat region of said HSV genome such that the region is rendered incapable of expressing an active gene product from only one copy each of ICP0, ICP4, ORFO, ORFP, and  $\gamma_1$ 34.5 ~~gene expresses an active gene product, and further comprising a U<sub>L</sub>24 gene and a U<sub>L</sub>56 gene each rendered incapable of expressing an active gene product,~~ wherein said administering results in one or more tumor cells infected with said HSV, said amount of HSV being effective to reduce the non-central nervous system tumor mass and safe for administration to the patient.
2. (Canceled)
3. (Currently amended) The method of claim [[2]] 1 wherein the modification comprises an insertion of a DNA sequence comprising one or more nucleotides.
4. (Currently amended) The method of claim [[2]] 1 wherein the modification comprises a deletion.
5. (Currently amended) The method of claim 1, [[2,]] 3, or 4 wherein the modified HSV genome further comprises deletion of a gene selected from the group consisting of  $\alpha$ 0, U<sub>L</sub>2, U<sub>L</sub>3, U<sub>L</sub>4, U<sub>L</sub>10, U<sub>L</sub>11, U<sub>L</sub>12, U<sub>L</sub>12.5, U<sub>L</sub>13, U<sub>L</sub>16, U<sub>L</sub>20, U<sub>L</sub>21, U<sub>L</sub>23, U<sub>L</sub>24, U<sub>L</sub>39, U<sub>L</sub>40, U<sub>L</sub>41, U<sub>L</sub>43, U<sub>L</sub>43.5, U<sub>L</sub>44, U<sub>L</sub>45, U<sub>L</sub>46, U<sub>L</sub>47, U<sub>L</sub>50, U<sub>L</sub>51, U<sub>L</sub>53, U<sub>L</sub>55, U<sub>L</sub>56,  $\alpha$ 22, U<sub>S</sub>1.5, U<sub>S</sub>2, U<sub>S</sub>3, U<sub>S</sub>4, U<sub>S</sub>5, U<sub>S</sub>7, U<sub>S</sub>8, U<sub>S</sub>8.5, U<sub>S</sub>9, U<sub>S</sub>10, U<sub>S</sub>11,  $\alpha$ 47, Ori<sub>S</sub>TU, and LATU.

- 6-9. (Canceled)
10. (Previously presented) The method of claim 5 wherein the gene is selected from the group consisting of U<sub>L</sub>16, U<sub>L</sub>24, U<sub>L</sub>40, U<sub>L</sub>41, U<sub>L</sub>55, U<sub>L</sub>56,  $\alpha$ 22, U<sub>S</sub>4, U<sub>S</sub>8, and U<sub>S</sub>11.
11. (Canceled)
12. (Previously presented) The method of claim 3 wherein the DNA sequence encodes HSV-2 glycoproteins G, J, D, and I.
13. (Previously presented) The method of claim 5 wherein the modified HSV is R7020.
- 14-15. (Canceled)
16. (Currently amended) The method of claim [[2]] 1 wherein the modified HSV is administered to the tumor by direct injection.
17. (Previously presented) The method of claim 1, wherein the non-central nervous system tumor is an epidermal carcinoma.
18. (Previously presented) The method of claim 1, wherein the non-central nervous system tumor is a prostate adenocarcinoma.
19. (Previously presented) The method of claim 1, wherein the non-central nervous system tumor is a hepatoma adenocarcinoma.
20. (Previously presented) The method of claim 1, wherein the HSV is administered in combination with irradiation.
21. (Previously presented) The method of claim 1, wherein the HSV is administered in the absence of irradiation.

22. (Currently amended) A method for treating a patient with a radiation-resistant cancer comprising administering to a patient suffering from the radiation-resistant cancer a therapeutically effective amount of a Herpes simplex virus (HSV) comprising a modified HSV genome wherein said modification comprises a modification of an inverted repeat region of said HSV genome such that the region is rendered incapable of expressing an active gene product from only one copy each of ICP0, ICP4, ORF0, ORFP, and  $\gamma_1$ 34.5-gene-expresses-an-active-gene-product, and further comprising a U<sub>L</sub>24 gene and a U<sub>L</sub>56 gene each rendered incapable of expressing an active gene product, wherein said administering results in one or more tumor cells infected with said HSV, said amount of HSV being effective to reduce the non-central nervous system tumor mass and safe for administration to the patient.
23. (Previously presented) The method of claim 21, wherein the HSV is administered in combination with irradiation.